

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION OF TRANSMITTAL
OF COPIES OF TRANSLATION
OF THE INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY
(CHAPTER I OR CHAPTER II
OF THE PATENT COOPERATION TREATY)
(PCT Rules 44bis.3(c) and 72.2)

To:

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PATENTANWÄLTE

16. Feb. 2007

Date of mailing (day/month/year)

08 February 2007 (08.02.2007)

Applicant's or agent's file reference
K 12 P 79 WO**IMPORTANT NOTIFICATION**International application No.
PCT/EP2005/001470International filing date (day/month/year)
14 February 2005 (14.02.2005)

Applicant

KETTENBACH GMBH & CO. KG et al

1. Transmittal of the translation to the applicant.

The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter I).



The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter II).

2. Transmittal of the copy of the translation to the designated or elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

KR

The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EG, EP, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

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TRANSLATION

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference K 12 P 79 WO	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/EP2005/001470	International filing date (day/month/year) 14.02.2005	Priority date (day/month/year) 13.02.2004
International Patent Classification (IPC) or national classification and IPC A61K6/093, A61K6/10		
Applicant KETTENBACH GMBH & CO. KG		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of _____ sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

a. ☐ (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:

☐ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____

_____ , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the report |
| <input type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input checked="" type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> | Box No. VIII | Certain observations on the international application |

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2005/001470

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This report is based on translations from the original language into the following language _____ which is the language of a translation furnished for the purposes of:

- ☐ international search (Rule 12.3 and 23.1(b))
☐ publication of the international application (Rule 12.4)
☐ international preliminary examination (Rule 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):

☐ the international application as originally filed/furnished

☒ the description:

pages 2-63 as originally filed/furnished
 18.03.2005 with letter
 of 11.03.2005

pages* 1 received by this Authority on _____

pages* _____ received by this Authority on _____



the claims:

nos. 1-22 as originally filed/furnished

nos.* _____ as amended (together with any statement) under Article 19

nos.* _____ received by this Authority on _____

nos.* _____ received by this Authority on _____



the drawings:

sheets _____ as originally filed/furnished

sheets* _____ received by this Authority on _____

sheets* _____ received by this Authority on _____



a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages _____

☐ the claims, nos. _____

☐ the drawings, sheets/figs _____

☐ the sequence listing (specify): _____

☐ any table(s) related to sequence listing (specify): _____



4. This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

☐ the description, pages _____

☐ the claims, nos. _____

☐ the drawings, sheets/figs _____

☐ the sequence listing (specify): _____

☐ any table(s) related to sequence listing (specify): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2005/001470

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability:
citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims <u>1-22</u>	YES
	Claims _____	NO
Inventive step (IS)	Claims <u>1-22</u>	YES
	Claims _____	NO
Industrial applicability (IA)	Claims <u>1-22</u>	YES
	Claims _____	NO

2. Citations and explanations (Rule 70.7)

1 Reference is made to the following document:

D1: EP 1 226 808 A

2 Document D1 is regarded as the closest prior art.
It discloses:

the use of mixtures containing

A) alkoxysilyl-functional polyethers with a linear or branched main chain, having an average molecular weight (Mn) of 800 - 20 000, having

a polyether group content of 20 - 95%,

an alkoxysilyl group - $\text{SiR}^1\text{R}^2\text{R}^3$ content of 0.2 - 25%,

R^1 , R^2 and R^3 independently of one another being H, alkyl or alkoxy,

having a urethane group content of 0 - 10% or a urea group content of 0 - 10%, and

B) a mixture containing water and organic and/or

inorganic acids in weight ratios of 1:0.01 to 1:40, as

impression or duplication compounds in the dental sector

from which the subject matter of independent claim 1

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2005/001470

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

differs in that the catalyst is a particular salt (see claim 1).

2.1 The subject matter of claim 1 is therefore novel (PCT Article 33(2)).

The problem addressed by the present application can therefore be considered that of providing a hydrophilic, condensation-crosslinking dental material based on alkoxyethyl polyethers which is stable on storage, exhibits high biocompatibility, is amenable, moreover, to the addition of acid-labile adjuvants, and has ingredients which as far as possible are toxicologically unobjectionable.

2.2 The solution proposed for this problem in claim 1 of the present application involves an inventive step (PCT Article 33(3)), the reasons being as follows:
Surprisingly it has been possible in the context of the present application to find that the salt catalysts to be used have a high catalytic activity to condensation reactions and are therefore outstandingly suitable for use as a catalyst in condensation-crosslinking dental materials based on alkoxyethyl-functional polyethers.

3 Document D1 is considered to be the closest prior art. It discloses a condensation-crosslinking two-component dental impression material, from which the subject matter of independent claim 2 differs in that the catalyst is a particular salt (see claim 2).

3.1 The subject matter of claim 2 is therefore novel

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2005/001470

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

(PCT Article 33(2)).

The problem addressed by the present application can therefore be considered that of providing a hydrophilic, condensation-crosslinking dental material based on alkoxyethyl polyethers that is stable on storage, exhibits high biocompatibility, is amenable, moreover, to the addition of acid-labile adjuvants, and contains ingredients which as far as possible are toxicologically unobjectionable.

3.2 The solution proposed for this problem in claim 2 of the present application involves an inventive step (PCT Article 33(3)), the reasons being as follows:

See 2.2 (mentioned above).

3.3 Claims 3-20 are dependent on claim 2 and therefore likewise meet the PCT requirements for novelty and inventive step.

4 The subject matter of claim 21 is also, therefore, novel (PCT Article 33(2)) and thus likewise meets the PCT requirements for inventive step (PCT Article 33(3)).

5 The use of a dental material according to any one of claims 1 to 21 in dental medicine and/or dental engineering is also, therefore, novel (PCT Article 33(2)) and claim 22 thus likewise meets the PCT requirements for inventive step (PCT Article 33(3)).

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2005/001470

Box No. VI Certain documents cited

1. Certain published documents (Rule 70.10)

Application No.
Patent No.

Publication date
(day/month/year)

Filing date
(day/month/year)

Priority date (valid claim)
(day/month/year)

2. Non-written disclosures (Rule 70.9)

Kind of non-written disclosure

Date of non-written disclosure
(day/month/year)

Date of written disclosure
referring to non-written disclosure
(day/month/year)

See supplemental sheet